

2006 MONITOR EXTENDER TECHNICAL SPECIFICATIONS

Monitor Extender is a powerful utility that enhances the capabilities of the Apple II monitor ROMs. Debugging and deciphering code and data areas is made easier with commands that allow different display formats and ASCII text entry. The search command finds those elusive bytes quickly while filling and moving sections of memory is simple. Although Monitor Extender comes on tape, it can be saved onto and run from disk: optional commands allow reading, writing and formatting of diskettes. The enhanced disassembler creates a labeled ASCII file in memory, that can be saved to disk or tape or just listed for convenient study. Monitor Extender works in complete harmony with the monitor ROMs by extending existing commands and adding new ones.

DETAILS

Display Commands: In addition to the normal hex display, memory may be displayed in ASCII or binary.

Depositing Commands: ASCII data may be entered directly from the keyboard without converting to hex. Strings may be terminated with a null byte, a carriage return, or not have a terminator. The fill command sets a range of memory to any byte value.

Moving, Searching, and Verifying Commands: Any size block of memory can be moved upward or downward to any other address regardless of address overlapping. The search command looks for a sequence of 1 to 63 bytes and displays the starting addresses of all matches. The checksum command can be used to verify data entry and monitor memory value change.

Disk Commands: These optional commands allow you to access any track or section of a diskette or to format an entire disk. The disk buffer can be examined or modified with any of the Monitor Extender or Apple monitor commands. These commands work with DOS 3.2, 3.2.1., or 3.3.

The Disassembler: This powerful utility disassembles a range of memory into an ASCII file in memory. Pseudo labels are generated for the instructions and references checked. The result is a labelled file that can be used for assembler source code. Disassemblies of several memory ranges can be appended to create one large file. Commands for listing the file, determining file size, and compressing the file to remove redundant blanks are also included.

Miscellaneous: Also included is a routine for "slow-listing" output with start/stop/abort control. This routine works with all Monitor Extender and Apple monitor commands and can even be called from BASIC.

Documentation: A comprehensive manual is included and a Reference Card that lists all the Monitor Extender command plus all the regular Apple Monitor commands. This is the first such reference card for the machine language programmer.

Memory Usage: Code - 1 1/4 K bytes
Disk Buffer - 256 bytes
Text Buffer - variable

Monitor Extender will run from any memory page boundary without any messy relocation - just load it and go. Certain functions may require changing one or two bytes of the code to run correctly.

2007 DISK FIXER TECHNICAL SPECIFICATIONS

Disk Fixer, a sector access utility, is a fast and powerful tool for the experienced programmer. Providing easy access to the individual sectors of either a 13-sector or 16-sector formatted disk gives the programmer the ability to read, write or modify the contents of the disk in several modes. Partially damaged programs, data or housekeeping information can often be repaired to recover from hardware crashes, program errors, or operating mistakes. Routine maintenance like directory sorting, remaining files, and space allocation checking will help keep your disks and programs up-to-date. Disk Fixer can also help you create special purpose disks quickly and efficiently.

DISPLAYS

Sector information can be displayed in hex, ASCII or a mixture of both. Status information is displayed in either hex or decimal. A selectable Output Filter allows control of inverse, flashing or control character displays. Lowercase adapters are also supported.

Separate displays are available for the directory, the VTOC, and file scanning track and sector lists.

EDITING

The eight edit buffers can be manipulated in a multitude of ways. Entries can be made in hex or ASCII (normal, flashing, inverse and lowercase if displayable); deletions and insertions are as simple as single byte changes. Cursor based editing lets you move around the buffers quickly and easily.

I/O COMMANDS

Sectors can be read into or written from any of the eight buffers or conveniently copied from one drive to another. The disk Directory and VTOC have their own buffers.

DIRECTORY & VTOC COMMANDS

The directory can be sorted by file name or type. File names are easily changed (including flashing, inverse, lowercase, or control characters). The Directory 'Fix' command checks file size information and makes any needed correction; the VTOC 'Fix' command checks file sector allocations and makes any needed changes. File allocation can be graphically mapped by name. The cursor based VTOC Edit mode lets you allocate or free individual sectors or tracks with a press of a key.

SCAN MODES:

Sequential sector scanning or file scanning using the arrow keys let you conveniently move back and forth through the disk or file. When scanning a file, the track and sector list is available for inspection. Even files with unallocated sectors can be scanned.

MISCELLANEOUS

At any time, the screen contents may be dumped to a printer for inspections and study. Switching between 13-sector and 16-sector operation makes moving sectors between different formats disks a snap. Error recovery commands let you correct editing errors before writing a buffer to disk; in fact, all changes are done in memory and you must specifically give the commands to make them permanent. Nothing is taken for granted so you can try things out before actually altering the disk. Extensive documentation and a command reference card are included.

Disk Fixer works with DOS 3.2, 3.2.1, 3.3, and the Language System. A minimum of 32K of memory is required.